

**Amendment to the Claims:**

Claims 1-5 (Previously Withdrawn).

Claims 5-12 (Previously Canceled).

Claims 13-16 (Previously Withdrawn).

17. (Currently Amended) A transgenic mouse whose genome comprises a homozygous disruption in an endogenous low density lipoprotein-related protein 5 gene, ~~wherein~~ ~~where the disruption is homozygous, the transgenic mouse lacks production of low density lipoprotein-related protein 5 and~~ said mouse exhibiting exhibits at least one of the following phenotypes relative to a wild-type mouse: retinal degeneration, increased anxiety or hypoactivity.
18. (Previously Presented) The transgenic mouse of claim 17, wherein the increased anxiety is characterized by a decrease in time spent in a central region of an open field environment, relative to a wild-type mouse.
19. (Previously Presented) The transgenic mouse of claim 17, wherein the hypoactivity is characterized by a decrease in total distance traveled in an open field environment, relative to a wild-type mouse.
20. (Previously Presented) A cell or tissue obtained from the transgenic mouse of claim 17.
21. (Previously Presented) A transgenic mouse whose genome comprises a heterozygous disruption in an endogenous low density lipoprotein-related protein 5 gene, wherein the disruption in a homozygous state inhibits production of functional low density lipoprotein-related protein 5 resulting in a transgenic mouse exhibiting retinal degeneration.
22. (Previously Presented) The transgenic mouse of claim 21, wherein the increased anxiety is characterized by a decrease in time spent in a central region of an open field environment, relative to a wild-type mouse.
23. (Previously Presented) The transgenic mouse of claim 21, wherein the hypoactivity is characterized by a decrease in total distance traveled in an open field environment, relative to a wild-type mouse.
24. (Previously Presented) A method of producing a transgenic mouse whose genome comprises a disruption in an endogenous low density lipoprotein-related protein 5 gene, the method comprising:

(a) providing a mouse embryonic stem cell comprising a disruption in an endogenous low density lipoprotein-related protein 5 gene; and

(b) introducing the mouse embryonic stem cell into a mouse blastocyst;

(c) implanting the resulting blastocyst into a pseudopregnant mouse, wherein the pseudopregnant mouse gives birth to a chimeric mouse; and

(d) breeding the chimeric mouse to produce the transgenic mouse;

wherein where the disruption is homozygous, the transgenic mouse lacks production of functional low density lipoprotein-related protein 5 and exhibits at least one of the following: retinal degeneration, increased anxiety or hypoactivity.

25. (Previously Presented) The transgenic mouse produced by the method of claim 24.